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Patent Number	7,066,198 B2
Issue Date	JUN 27, 2006
Application Number	10/749,968
Filing Date	JAN 2, 2004
First Named Inventor	Jason L Smith
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US007066198B2

(12) **United States Patent**  
**Smith**

(10) **Patent No.:** **US 7,066,198 B2**  
(45) **Date of Patent:** **Jun. 27, 2006**

(54) **PRESSURIZED FLUID CONTROLLER  
USING TILT / PUSH / PULL OPERATOR**

(76) Inventor: **Jason L. Smith, Junction Way, San  
Jose, CA (US) 95131**

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 104 days.

(21) Appl. No.: **10/749,968**

(22) Filed: **Jan. 2, 2004**

(65) **Prior Publication Data**

US 2005/0145283 A1 Jul. 7, 2005

(51) **Int. Cl.**  
**F16P 1/00** (2006.01)

(52) **U.S. Cl.** ..... 137/377; 137/636

(58) **Field of Classification Search** ..... 137/636.2,  
137/636.3, 636, 377  
See application file for complete search history.

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(57) **ABSTRACT**

An intuitive pressurized fluid controller using tilt/push/pull (3 axis) operator includes a swivel joint such that it can move axially and tilt. A first array of valves is arranged to be activated as the lever tilts. A second array of valves is arranged so they can be activated when the lever is pulled axially. A third array of valves is arranged so they can be activated when the lever is pushed axially. When plumbed to a plurality of pressurable positioners supporting heavy equipment, the first array of valves can control the equipment pitch and roll as the lever is tilted, and the second/third arrays of valves can control the equipment elevation as the lever is pulled/pushed.

**4 Claims, 6 Drawing Sheets**

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